

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-17. (Canceled)

18. (New) A method of providing a network device status web page, comprising:

receiving a plurality of reports from a plurality of monitoring units, wherein each of the plurality of monitoring units generates the reports based on one or more test messages sent to each of a plurality of remote network connected devices;

associating, based on the received status reports, one of an available status, an unavailable status, and an abnormal status with each of the plurality of remote network connected devices;

updating a web page with the status associated with each of the plurality of remote network connected devices; and

providing the web page to a user, wherein the web page displays the status associated with each of the plurality of remote network connected devices.

19. (New) The method of claim 18, wherein the web page displays a graphical status indicator corresponding to the status associated with each of the plurality of remote network connected devices.

20. (New) The method of claim 18, further comprising:

accumulating historical information for each of the plurality of remote network connected devices based on the plurality of status reports received over a period of time; and
analyzing the historical information to produce statistical data that evidences performance of the network connected devices.

21. (New) The method of claim 20, wherein analyzing the historical information comprises:

calculating an average, minimum, maximum, and standard deviation associated with the historical information.

22. (New) The method of claim 20, wherein analyzing the historical information comprises:

performing a multivariate regression analysis to ascertain cause and effect relationships between data of the historical information.

23. (New) The method of claim 22, further comprising:

reporting a result of the regression analysis when a regression correlation is greater than a predetermined value.

24. (New) The method of claim 18, wherein the available status indicates that a corresponding network connected device of the plurality of remote network connected devices is available for handling message traffic.

25. (New) The method of claim 24, wherein the unavailable status indicates that a corresponding network connected device of the plurality of remote network connected devices is not available for handling message traffic.
26. (New) The method of claim 25, wherein the abnormal status indicates that a corresponding network connected device of the plurality of remote network connected devices is handling message traffic in an abnormal fashion.
27. (New) The method of claim 18, further comprising:
updating the web page with a throughput value, a test type, a data rate, and a network device identifier associated with each of the plurality of remote network connected devices.
28. (New) The method of claim 18, wherein the web page displays a bar graph illustrating throughput values associated with a selected one of the plurality of remote network connected devices.
29. (New) One or more network devices, comprising:
a queue configured to receive a plurality of reports from a plurality of monitoring units, wherein each of the plurality of monitoring units generates the reports based on one or more test messages sent to each of a plurality of remote network connected devices; and

a web generator configured to associate, based on the received status reports, one of an available status, an unavailable status, and an abnormal status with each of the plurality of remote network connected devices; and

a web server configured to host a status web page,

wherein the web generator is further configured to:

update the status web page with the status associated with each of the plurality of remote network connected devices, and

provide the status web page to a user, wherein the status web page displays the status associated with each of the plurality of remote network connected devices.

30. (New) The one or more network devices of claim 29, wherein the status web page displays graphical status indicators corresponding to the status associated with each of the plurality of remote network connected devices.

31. (New) The one or more network devices of claim 29, further comprising:

a knowledge base configured to:

accumulate historical information for each of the plurality of remote network connected devices based on the status reports received over a period of time, and

analyze the historical information to produce statistical data that evidences performance of the network connected devices.

32. (New) The one or more network devices of claim 31, wherein, when analyzing the historical information, the knowledge base is further configured to:

calculate an average, minimum, maximum, and standard deviation associated with the historical information.

33. (New) The one or more network devices of claim 31, wherein, when analyzing the historical information, the knowledge base is further configured to:

perform a multivariate regression analysis to ascertain cause and effect relationships between data of the historical information.

34. (New) The one or more network devices of claim 33, wherein the knowledge base is further configured to:

report a result of the regression analysis if a regression correlation is greater than a predetermined value.

35. (New) The one or more network devices of claim 29, wherein the available status indicates that a corresponding network connected device of the plurality of remote network connected devices is available for handling message traffic.

36. (New) The one or more network devices of claim 35, wherein the unavailable status indicates that a corresponding network connected device of the plurality of remote network connected devices is not available for handling message traffic.

37. (New) The one or more network devices of claim 36, wherein the abnormal status indicates that a corresponding network connected device of the plurality of remote network connected devices is handling message traffic in an abnormal fashion.

38. (New) The one or more network devices of claim 29, wherein the web generator is further configured to:

update the status web page with a throughput value, a test type, a data rate, and a network device identifier associated with each of the plurality of remote network connected devices.

39. (New) The one or more network devices of claim 29, wherein the status web page displays a bar graph illustrating throughput values associated with a selected one of the plurality of remote network connected devices.

40. (New) A method of analyzing historical data associated with a plurality of remote network connected devices, comprising:

receiving a plurality of reports from a plurality of monitoring units, wherein each of the plurality of monitoring units generates the reports based on test messages sent to the plurality of remote network connected devices;

associating, based on the received status reports, one of an available status, an unavailable status, and an abnormal status with each of the plurality of remote network connected devices;

incorporating the status associated with each of the plurality of remote network connected devices into historical information associated with each of the plurality of remote network connected devices;

analyzing the historical information to produce analysis data for each of the plurality of remote network connected devices; and

providing analysis data associated with at least one of the plurality of remote network connected devices to one or more recipients.

41. (New) The method of claim 40, wherein the analysis data is provided based on requests received from the one or more recipients.

42. (New) The method of claim 40, wherein the analysis data is provided to the one or more recipients via e-mails or pages.

43. (New) The method of claim 40, wherein analyzing the historical information comprises:

calculating an average, minimum, maximum, and standard deviation associated with the historical information.

44. (New) The method of claim 40, wherein analyzing the historical information comprises:

performing a multivariate regression analysis to ascertain cause and effect relationships between data of the historical information.

45. (New) The method of claim 44, further comprising:

reporting a result of the regression analysis if a regression correlation is greater than a predetermined value.

46. (New) One or more network devices, comprising:

a status queue configured to:

receive a plurality of reports from a plurality of monitoring units, wherein each of the plurality of monitoring units generates the reports based on test messages sent to the plurality of remote network connected devices, and

associate, based on the received status reports, one of an available status, an unavailable status, and an abnormal status with each of the plurality of remote network connected devices; and

a knowledge base unit configured to:

incorporate the status associated with each of the plurality of remote network connected devices into historical information associated with each of the plurality of remote network connected devices,

analyze the historical information to produce analysis data for each of the plurality of remote network connected devices, and
provide analysis data associated with at least one of the plurality of remote network connected devices to one or more recipients.

47. (New) The one or more network devices of claim 46, wherein the knowledge base unit is further configured to:

provide the analysis data to the one or more recipients based on requests received from the one or more recipients.

48. (New) The one or more network devices of claim 46, wherein the knowledge base unit is further configured to:

provide the analysis data to the one or more recipients via e-mails or pages.

49. (New) The one or more network devices of claim 46, wherein, when analyzing the historical information, the knowledge base unit is further configured to:

calculate an average, minimum, maximum, and standard deviation associated with the historical information.

50. (New) The one or more network devices of claim 46, wherein, when analyzing the historical information, the knowledge base unit is further configured to:

perform a multivariate regression analysis to ascertain cause and effect relationships between data of the historical information.

51. (New) The one or more network devices of claim 50, wherein, when analyzing the historical information, the knowledge base unit is further configured to:

report a result of the regression analysis if a regression correlation is greater than a predetermined value.

52. (New) A graphical user interface for monitoring the availability of remote network connected devices, comprising:

a first activation area on the graphical user interface for displaying one or more graphical status indicators associated with each of a plurality of the remote network connected devices, wherein each of the one or more graphical status indicators indicates one of an available status, an unavailable status and an abnormal status resulting from one or more tests performed on each of the plurality of remote network connected devices, and

wherein each of the one or more graphical status indicators activates, upon user selection, a selected one a plurality of second activation areas,

wherein each of the second activation areas display details of the one or more tests performed on a corresponding one of the plurality of remote network connected devices.

53. (New) The graphical user interface of claim 52, wherein the second activation area displays a bar graph illustrating throughput values associated with the corresponding one of the plurality of remote network connected devices.

54. (New) The graphical user interface of claim 52, wherein the second activation area displays a test type, a data rate, and a network device identifier associated with the one or more tests performed on the corresponding one of the plurality of remote network connected devices.

55. (New) A system for testing a network, comprising:

a device list that includes a list of remote network connected devices to be tested, a set of possible network routes used to access the remote network connected devices, and types of tests to be performed on each device of the network connected devices;

a plurality of queues;

a timing unit configured to:

read the device list to obtain identifiers associated with each of the network connected devices and the types of tests to be performed on each of the network connected devices, and

deposit the identifiers and the types of tests in appropriate queues of the plurality of queues; and

a plurality of monitoring units, each of the plurality of monitoring units being associated with a respective one of the plurality of queues, wherein each of the plurality of

monitoring units is configured to:

read the identifiers and the types of tests from a respective queue of the plurality of queues,

send one or more test messages, based on the types of tests, to a network connected device corresponding to the identifiers, and

create status information for the network connected device based on the network connected device's response to the one or more test messages.